

REMARKS

INTRODUCTION

In accordance with the foregoing, claims 1, 9 and 15 have been amended. Claims 6, 7, 12, 13, 18 and 20-28 have been cancelled. Claims 1-5, 8-11, 14-17 and 19 are pending and under consideration.

CLAIM OBJECTION

Claim 25 was objected to because of an informality. Claim 25 has been cancelled.

CLAIM REJECTIONS -- 101

Claims 20-22, 27 and 28 were rejected under 35 USC 101 as directed to non-statutory subject matter. Claims 20-22, 27 and 28 have been cancelled.

CLAIM REJECTIONS – 102 and 103

Claims 1-28 were rejected under 35 USC 102(e) as being anticipated by Hagiwara et al. (US 2006/0023589) (hereinafter "Hagiwara").

Claim 5 was rejected under 35 USC 103(a) as being unpatentable over Hagiwara in view of Mochizuki et al. (US 6,538,965) (hereinafter "Mochizuki").

Hagiwara discusses an optical disk device recording data on a recordable or rewritable optical disk by setting a recording velocity and a recording power for each of zones on an optical disk. In Hagiwara, an optical disk 1 is revolved by a spindle motor 2. The spindle motor 2 is controlled by a motor driver 3 and a servo means 4 so that the spindle motor 2 revolves the optical disk 1 by a CLV (Constant Linear Velocity) method. Hagiwara, paragraph [0167] and Figure 1.

In Hagiwara when a -Pause signal is supplied to an AND circuit 31, a supply of a clock signal to the CD-ROM encoder 15 and a CIRC (Cross Interleave Read-Solomon Code) encoder 32 (in the CD encoder 14) is interrupted. Thereby, the CD-ROM encoder 15 and the CIRC encoder 32 stop encoding operations and also cease outputting record data (write data). In addition, a gate signal (Write Gate) supplied from the CIRC encoder 32 which enables a data-recording by being active is masked also by the -Pause signal in an AND circuit 33; therefore, a data-recording to the optical disk 1 is stopped. Since data being encoded remains in the buffer

RAM 10, when the -Pause signal is cancelled, record data is continuously output, and upon canceling the mask of the Write Gate, the data-writing to the optical disk 1 is resumed. It should be noted that the -Pause signal needs to be highly synchronized for the pause and the restart of a data-writing, and a timing of supplying the -Pause signal (commencing the pause operation) is performed for each sector. In order to determine the precise resuming (data-writing) position, a timing detection circuit 21 accurately adjusts an end of data written last time. This is a circuit that counts the frame sync clock so as to generate a timing signal that provides a start timing of a data-recording. Hagiwara, paragraphs [0183] and [0185] and Figures 4, 5 and 6.

Claims 1-8

Independent amended claim 1 recites: "...a spindle motor driving unit which controls a rotation speed of the spindle motor by using the clock signal generated from the clock generator." Support for this amendment may be found in at least original claim 6. In contrast to claim 1, Hagiwara only discusses that a spindle motor 2 is controlled by a motor driver 3 and a servo means 4 so that the spindle motor 2 revolves the optical disk 1 by the constant linear velocity method. The optical disk device and methods discussed in Hagiwara are for recording data on a recordable or rewritable optical disk by setting a recording velocity and a recording power for each of the plurality of zones on an optical disk. For example, in Hagiwara, the optimum power calibration is performed at the recording velocity 12x in the zone Z0 at the innermost periphery of the optical disk 1 so as to calculate the magnitude of the recording power in the zone Z0. In contrast to claim 1, Hagiwara does not discuss using the clock signal generated from the clock generator to control rotation speed of the spindle motor. As such, it is respectfully submitted that Hagiwara does not anticipate claim 1.

Claims 6 and 7 have been cancelled. Claims 2-5 and 8 depend from claim 1 and are therefore believed to be allowable for at least the foregoing reasons.

Withdrawal of the foregoing rejection is requested.

Claims 9-14

Amended independent claim 9 recites: "...a spindle motor driving unit which controls a rotation speed of the spindle motor by synchronizing with the identifying signal." Support for this amendment may be found in at least original claim 12. In contrast to claim 9, Hagiwara only discusses that a spindle motor 2 is controlled by a motor driver 3 and a servo means 4 so that

the spindle motor 2 revolves the optical disk 1 by the constant linear velocity method. The optical disk device and methods discussed in Hagiwara are for recording data on a recordable or rewritable optical disk by setting a recording velocity and a recording power for each of the predetermined zones on an optical disk. For example, in Hagiwara, the optimum power calibration is performed at the recording velocity 12x in the zone Z0 at the innermost periphery of the optical disk 1 so as to calculate the magnitude of the recording power in the zone Z0. In contrast to claim 9, Hagiwara does not discuss synchronizing with the identifying signal to control rotation speed of the spindle motor. As such, it is respectfully submitted that Hagiwara does not anticipate claim 9.

Claims 12 and 13 have been cancelled. Claims 10, 11 and 14 depend from claim 9 and are therefore believed to be allowable for at least the foregoing reasons.

Withdrawal of the foregoing rejection is requested.

Claims 15-19

Amended independent claim 15 recites: "...controlling a rotation speed of a spindle motor that rotates the disc by synchronizing with the clock signal." Support for this amendment may be found in at least original claim 18. In contrast to claim 15, Hagiwara only discusses that a spindle motor 2 is controlled by a motor driver 3 and a servo means 4 so that the spindle motor 2 revolves the optical disk 1 by the constant linear velocity method. The optical disk methods discussed in Hagiwara are for recording data on a recordable or rewritable optical disk by setting a recording velocity and a recording power for each of the zones on an optical disk. For example, in Hagiwara, the optimum power calibration is performed at the recording velocity 12x in the zone Z0 at the innermost periphery of the optical disk 1 so as to calculate the magnitude of the recording power in the zone Z0. In contrast to claim 15, Hagiwara does not discuss controlling a rotation speed of a spindle motor that rotates the disc by synchronizing with the clock signal. As such, it is respectfully submitted that Hagiwara does not anticipate claim 15.

Claim 18 has been cancelled. Claims 16, 17 and 19 depend from claim 15 and are therefore believed to be allowable for at least the foregoing reasons.

Withdrawal of the foregoing rejection is requested.

Claims 20-28

Claims 20-28 have been cancelled.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By: Gregory W. Harper
Gregory W. Harper
Registration No. 55,248

1201 New York Avenue, NW, 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501